

The bioinformatics lab

- Default Web Applications -

Outline

- Presentation of results from last week (Databases and SQL)
- Short presentation about Web Applications
- Starting the programming challenge

Announcement

- special practical: 2010 / 06 / 28
- 'Computer Clusters and External Services'
- guided tour in the LRZ to see all the server and services in live operation
- we meet at 2 p.m. in the rostlab!
- a photo identification is required



Presentation of results from last week

- Databases and SQL
- Tatjan Goldberg

Web Applications

- Web application is an application that is accessed over a network such as the Internet or an intranet
- Web applications are popular due to the ubiquity of web browsers, and the convenience of using a web browser as a client
- Common web applications include webmail, online retail sales, online auctions, wikis and many other functions
- Web services are typically application programming interfaces (API) or web APIs that are accessed via Hypertext Transfer Protocol and executed on a remote system hosting the requested services.

Web Applications in a Bioinformatic lab

- Wiki
 - a website that allows the easy creation and editing of any number of interlinked web pages via a web browser
 - often used to create collaborative websites, to power community websites, for personal note taking, in corporate intranets, and in knowledge management systems
 - MediaWiki
- CMS: Content Management System – WCMS: Web Content Management System
 - software, implemented as a Web application, for creating and managing content such as HTML
 - to manage and control a large, dynamic collection of Web material (HTML documents and their associated images)
 - content creation, content control, editing, and essential Web maintenance functions
 - Typo3
- Webmail
 - an e-mail service intended to be primarily accessed via a web browser, as opposed to through a desktop e-mail client
 - SquirrelMail
- Bug Tracking system
 - a software application that is designed to help quality assurance and programmers keep track of reported software bugs in their work
 - Bugzilla

Web Applications in a Bioinformatic lab

- Database Web Admin
 - Interface for a Database Management System (DBMS)
 - phpMyAdmin
- LDAP Web Admin
 - web-based LDAP administration tool for creating and editing LDAP entries in any LDAP server
 - phpLDAPadmin
- Web and User Statistik
 - applications that generate web pages of analysis, from access and usage logs
 - Webalizer, Google Analytics
- Computer and Network Monitoring
 - watches hosts and services, alerting users when things go wrong and again when they get better
 - Ganglia

Web Applications in a Bioinformatic lab

- Web – Calendar (+ web interface)
 - a computer file format which allows internet users to send meeting requests and tasks to other internet users
 - different protocols exist
 - davical
- FTP server
 - standard network protocol used to copy a file from one host to another over a TCP/IP-based network, such as the Internet
- Forum
 - or message board, is an online discussion site
- Chat room
 - direct one-on-one chat or text-based group chat

Web Applications - Commonness

- They use a database as backbone
 - MySQL
- They need a user management
 - LDAP
- Improve usability

Today's programming

- Install, configure and connect all these services
;-)

Today's programming

- REVIEWED!
- Install a wiki implementation
- Install the CMS of your choice (e.g. Typo3)
- Connect the user management of the CMS with your LDAP
- Create a simple web page with your CMS for the practical
- See hints and tips in the owiki